

Amendment to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Previously Presented): A multilayer packaging film having at least four layers arranged in sequence comprising:

(1) a first layer comprising at least 50% by weight of a copolymer of propene, and at least one α -olefin selected from the group consisting of ethylene, butene-1, methylpentene-1, hexene-1, octene-1, decene-1 and mixtures thereof, said copolymer having a propene content of at least 60 wt. %, a T_m between about 100°C and about 145°C, a M_w/M_n of between 1 and 5, and n-hexane extractables of less than 5 wt. %;

(2) second and fourth layers each comprising:

(a) at least 10 wt. % of a first copolymer of ethylene and at least one C_4 - C_8 α -olefin, said copolymer having a density of from 0.900 to 0.915 g/cm³ and a melt index of less than 2 dg/min.,

(b) at least 10 wt. % of a second copolymer of ethylene with from 4 to 18 wt. % of a vinyl ester, alkyl acrylate, acrylic or methacrylic acid, and

(c) from 0 to 60 wt. % of a third copolymer of ethylene and at least one C_3 - C_8 α -olefin having a density less than 0.900 g/cm³ and a melting point of between 65-98°C; and

(3) a third layer comprising at least 80% by weight of at least one copolymer of vinylidene chloride with from 2-20 wt. %, based on said copolymer, of vinyl chloride or methyl acrylate.

2. (Original): The film of claim 1 wherein the first layer comprises a propylene-ethylene copolymer.

3. (Original): The film of claim 1 wherein the first layer comprises at least 75% by weight propylene-ethylene copolymer.

4. (Original): The film of claim 1 wherein said propene content of the first layer copolymer is at least 80% based on the weight of the copolymer.

5. (Original): The film of claim 1 wherein said propene content of the first layer copolymer is at least 90% based on the weight of the copolymer.

6. (Original): The film of claim 1 wherein the first layer consists essentially of propylene-ethylene copolymer.

7. (Original): The film of claim 1 wherein in the copolymer of the first layer the T_m is between about 110°C and 130°C.

8. (Original): The film of claim 1 wherein in the copolymer of the first layer the T_m is between about 120°C and 130°C.

9. (Original): The film of claim 1 wherein in the copolymer of the first layer the n-hexane extractables are less than 4 wt. %.

10. (Original): The film of claim 1 wherein in the copolymer of the first layer the n-hexane extractables are less than 2.6 wt. %.

11. (Original): The film of claim 1 wherein in the copolymer of the first layer the n-hexane extractables are less than 2 wt. %.

12. (Original): The film of claim 1 wherein in the copolymer of the first layer the n-hexane extractables are less than 1 wt. %.

13. (Original): The film of claim 1 wherein in the copolymer of the first layer the M_w/M_n is less than 3.

14. (Original): The film of claim 1 wherein in the copolymer of the first layer the M_w/M_n is between 1.5 and 2.5.

15. (Original): The film of claim 1 wherein in the copolymer of the first layer the Mw/Mn is less than 3 and the n-hexane extractables are less than 2.6 wt. %.

16. (Original): The film of claim 1 wherein in the copolymer of the first layer the Tm is between about 110°C and 130°C, and the n-hexane extractables are less than 2.6 wt. %.

17. (Original): The film of claim 1 wherein in the copolymer of the first layer the Tm is between about 110°C and 130°C, and the Mw/Mn is less than 3.

18. (Original): The film of claim 1 wherein in the copolymer of the first layer the Tm is between about 110°C and 130°C, the Mw/Mn is less than 3 and the n-hexane extractables are less than 2.6 wt. %.

19. (Original): The film of claim 18 wherein in the copolymer of the first layer the Mw/Mn is between 1.5 and 2.5.

20. (Original): The film of claim 18 wherein in the copolymer of the first layer the n-hexane extractables are less than 2 wt. %.

21. (Original): The film of claim 18 wherein in the copolymer of the first layer the n-hexane extractables are less than 1 wt. %.

22. (Currently Amended): A multilayer biaxially oriented heat-shrinkable packaging film comprising:

(1) a first layer comprising at least 50% by weight of a copolymer of propene, and at least one α -olefin selected from the group consisting of ethylene, butene-1, methylpentene-1, hexene-1, octene-1, decene-1 and mixtures thereof, said copolymer having a propene content of at least 60 wt. %, a T_m between about 100°C and about 145°C, a Mw/Mn of between 1 and 5, and n-hexane extractables of less than 4 wt. %;

(2) a second layer comprising:

(a) at least 10 wt. % of a first copolymer of ethylene and at least one C_4 - C_8 α -olefin, said copolymer having a density of from 0.900 to 0.915 g/cm³ and a melt index of less than 2 dg/min.,

(b) at least 10 wt. % of a second copolymer of ethylene with from 4 to 18 wt. % of a vinyl ester, alkyl acrylate, acrylic or methacrylic acid, and

(c) from 0 to 60 wt. % of a third copolymer of ethylene and at least one C_3 - C_8 α -olefin having a density less than 0.900 g/cm³ and a melting point [less] of between 85-98°C.; and

(3) a transition layer between and in contact with said first layer and said second layer, the transition layer comprising:

(a) at least 20% by weight of a fourth copolymer of propene, and at least one α -olefin selected from the group consisting of ethylene, butene-1, methylpentene-1, hexene-1, octene-1, decene-1 and mixtures thereof, said copolymer having a propene content of at least 60 wt. %, a T_m between 100°C and 145°C, a Mw/Mn of between 1 and 5, and n-hexane extractables of less than 4 wt. %;

(b) at least 20% by weight of a fifth copolymer of ethylene and at least one C_4 - C_8 α -olefin, said copolymer having a density of from 0.900 to 0.915 g/cm³ and a melt index of less than 2 dg/min., and

(c) from 0 to 60 wt. % of a sixth copolymer of ethylene and at least one C_3 - C_8 α -olefin having a density less than 0.900 g/cm³ and a melting point of between 65-98°C

(4) a third layer that is a moisture barrier layer comprising at least 80% by weight of at least one copolymer of vinylidene chloride with from 2-20 wt. %, based on said copolymer, of vinyl chloride or methyl acrylate.

23. (Original): The film of claim 22 wherein the transition layer comprises at least 50 wt. % of either the fourth copolymer or the fifth copolymer.

24. (Original): The film of claim 22 wherein the transition layer comprises about 3% of the total thickness of the film.

25. (Original): The film of claim 22 wherein the first layer comprises a propylene-ethylene copolymer.

26. (Original): The film of claim 22 wherein the first layer comprises at least 75% by weight propylene-ethylene copolymer.

27. (Original): The film of claim 22 wherein said propene content of the first layer copolymer is at least 80% based on the weight of the copolymer.

28. (Original): The film of claim 22 wherein said propene content of the first layer copolymer is at least 90% based on the weight of the copolymer.

29. (Original): The film of claim 22 wherein the first layer consists essentially of propylene-ethylene copolymer.

30. (Original): The film of claim 22 wherein in the copolymer of the first layer the T_m is about 110°C and 130°C.

31. (Original): The film of claim 22 wherein in the copolymer of the first layer the T_m is between about 120°C and 130°C.

32. (Original): The film of claim 22 wherein in the copolymer of the first layer the n-hexane extractables are less than 4 wt. %.

33. (Original): The film of claim 22 wherein in the copolymer of the first layer the n-hexane extractables are less than 2.6 wt. %.

34. (Original): The film of claim 22 wherein in the copolymer of the first layer the n-hexane extractables are less than 2 wt. %.

35. (Original): The film of claim 22 wherein in the copolymer of the first layer the n-hexane extractables are less than 1 wt. %.

36. (Original): The film of claim 22 wherein in the copolymer of the first layer the Mw/Mn is less than 3.

37. (Original): The film of claim 22 wherein in the copolymer of the first layer the Mw/Mn is between 1.5 and 2.5.

38. (Original): The film of claim 22 wherein in the copolymer of the first layer the Mw/Mn is less than 3 and the n-hexane extractables are less than 2.6 wt. %.

39. (Original): The film of claim 22 wherein in the copolymer of the first layer the T_m is between about 110°C and 130°C, and the n-hexane extractables are less than 2.6 wt. %.

40. (Original): The film of claim 22 wherein in the copolymer of the first layer the T_m is between about 110°C and 130°C, and the Mw/Mn is less than 3.

41. (Original): The film of claim 22 wherein in the copolymer of the first layer the T_m is between about 110°C and 130°C, the Mw/Mn is less than 3 and the n-hexane extractables are less than 2.6 wt. %.

42. (Original): The film of claim 41 wherein in the copolymer of the first layer the Mw/Mn is between 1.5 and 2.5.

43. (Original): The film of claim 41 wherein in the copolymer of the first layer the n-hexane extractables are less than 2 wt. %.

44. (Original): The film of claim 41 wherein in the copolymer of the first layer the n-hexane extractables are less than 1 wt. %.

45. (Canceled) The film of claim 22 further comprising:
a third layer comprising:
at least 80% by weight of at least one copolymer of vinylidene chloride with
from 2-20 wt. %, based on said copolymer, of vinyl chloride or methyl acrylate.

46. (Currently Amended): The film of claim ~~45~~ 22 further comprising:

a fourth layer comprising:

(a) at least 10 wt. % of a seventh copolymer of ethylene and at least one C₄ - C₈ α -olefin, said copolymer having a density of from 0.900 to 0.915 g/cm³ and a melt index of less than 2 dg/min.,

(b) at least 10 wt. % of a eighth copolymer of ethylene with from 4 to 18 wt. % of a vinyl ester, alkyl acrylate, acrylic or methacrylic acid, and

(c) from 0 to 60 wt. % of a ninth copolymer of ethylene and at least one C₃ - C₈ α -olefin having a density less than 0.900 g/cm³ and a melting point of between 65-98°C.

47. (Canceled): The film of claim 46 wherein the layers are arranged in contact and in the following sequence: first layer, transition layer, second layer, third layer and fourth layer.

48. (Previously Amended): A multilayer packaging film formable into a pouch by heat sealing for use in food preparation consisting essentially of:

(1) an inner sealing layer comprising at least 50% by weight of a copolymer of propene, and at least one α -olefin selected from the group consisting of ethylene, butene-1, methylpentene-1, hexene-1, octene-1, decene-1 and mixtures thereof, said copolymer having a propene content of at least 60 wt. %, a T_m between about 100°C and about 145°C, a Mw/Mn of between 1 and 5, and n-hexane extractables of less than 5 wt. %;

(2) a second layer in contact with the inner sealing layer comprising:

(a) at least 10 wt. % of a first copolymer of ethylene and at least one C_4 - C_8 α -olefin, said copolymer having a density of from 0.900 to 0.915 g/cm³ and a melt index of less than 2 dg/min.,

(b) at least 10 wt. % of a second copolymer of ethylene with from 4 to 18 wt. % of a vinyl ester, alkyl acrylate, acrylic or methacrylic acid, and

(c) from 0 to 60 wt. % of a third copolymer of ethylene and at least one C_3 - C_8 α -olefin having a density less than 0.900 g/cm³ and a melting point of between 65-98°C.; and

(3) an optional third layer comprising a protective outer layer.

49. (Original): The film of claim 48 wherein the third layer comprises nylon.

50. (Original): The film of claim 48 wherein the third layer comprises at least 50% by weight of a copolymer of propene, and at least one α -olefin selected from the group consisting of ethylene, butene-1, methylpentene-1, hexene-1, octene-1, decene-1 and mixtures thereof, said copolymer having a propene content of at least 60 wt. %, a T_m between about 100°C and about 145°C, a Mw/Mn of between 1 and 5, and n-hexane extractables of less than 5 wt. %.

51. (Original): The film of claim 48 wherein in the copolymer of the inner sealing layer the T_m is between about 110°C and 130°C.

52. (Original): The film of claim 48 wherein in the copolymer of the inner sealing layer the T_m is between about 120°C and 130°C.

53. (Original): The film of claim 48 wherein in the copolymer of the inner sealing layer the n-hexane extractables are less than 4 wt. %.

54. (Original): The film of claim 48 wherein in the copolymer of the inner sealing layer the n-hexane extractables are less than 2.6 wt. %.

55. (Original): The film of claim 48 wherein in the copolymer of the inner sealing layer the n-hexane extractables are less than 2 wt. %.

56. (Original): The film of claim 48 wherein in the copolymer of the inner sealing layer the n-hexane extractables are less than 1 wt. %.

57. (Original): The film of claim 48 wherein in the copolymer of the inner sealing layer the M_w/M_n is less than 3.

58. (Original): The film of claim 48 wherein in the copolymer of the inner sealing layer the M_w/M_n is between 1.5 and 2.5.

59. (Original): The film of claim 48 wherein in the copolymer of the inner sealing layer the M_w/M_n is less than 3 and the n-hexane extractables are less than 2.6 wt. %.

60. (Original): The film of claim 48 wherein in the copolymer of the inner sealing layer the T_m is between about 110°C and 130°C, and the n-hexane extractables are less than 2.6 wt. %.

61. (Original): The film of claim 48 wherein in the copolymer of the inner sealing layer the T_m is between about 110°C and 130°C, and the M_w/M_n is less than 3.

62. (Original): The film of claim 48 wherein in the copolymer of the inner sealing layer the T_m is between about 110°C and 130°C, the M_w/M_n is less than 3 and the n-hexane extractables are less than 2.6 wt. %.

63. (Original): The film of claim 62 wherein in the copolymer of the inner sealing layer the M_w/M_n is between 1.5 and 2.5.

64. (Original): The film of claim 62 wherein in the copolymer of the inner sealing layer the n-hexane extractables are less than 2 wt. %.

65. (Original): The film of claim 62 wherein in the copolymer of the inner sealing layer the n-hexane extractables are less than 1 wt. %.

66. (Original): The film of claim 50 wherein in the copolymers of the inner sealing layer and the outer layer the T_m is between about 110°C and 130°C.

67. (Original): The film of claim 50 wherein in the copolymers of the inner sealing layer and the outer layer the T_m is between about 120°C and 130°C.

68. (Original): The film of claim 50 wherein in the copolymers of the inner sealing layer and the outer layer the n-hexane extractables are less than 4 wt. %.

69. (Original): The film of claim 50 wherein in the copolymers of the inner sealing layer and the outer layer the n-hexane extractables are less than 2.6 wt. %.

70. (Original): The film of claim 50 wherein in the copolymers of the inner sealing layer and the outer layer the n-hexane extractables are less than 2 wt. %.

71. (Original): The film of claim 50 wherein in the copolymers of the inner sealing layer and the outer layer the n-hexane extractables are less than 1 wt. %.

72. (Original): The film of claim 50 wherein in the copolymers of the inner sealing layer and the outer layer the M_w/M_n is less than 3.

73. (Original): The film of claim 50 wherein in the copolymers of the inner sealing layer and the outer layer the Mw/Mn is between 1.5 and 2.5.

74. (Original): The film of claim 50 wherein in the copolymers of the inner sealing layer and the outer layer the Mw/Mn is less than 3 and the n-hexane extractables are less than 2.6 wt. %.

75. (Original): The film of claim 50 wherein in the copolymers of the inner sealing layer and the outer layer the Tm is between about 110°C and 130°C, and the n-hexane extractables are less than 2.6 wt. %.

76. (Original): The film of claim 50 wherein in the copolymers of the inner sealing layer and the outer layer the Tm is between about 110°C and 130°C, and the Mw/Mn is less than 3.

77. (Original): The film of claim 50 wherein in the copolymers of the inner sealing layer and the outer layer the Tm is between about 110°C and 130°C, the Mw/Mn is less than 3 and the n-hexane extractables are less than 2.6 wt. %.

78. (Original): The film of claim 77 wherein in the copolymers of the inner sealing layer and the outer layer the Mw/Mn is between 1.5 and 2.5.

79. (Original): The film of claim 77 wherein in the copolymers of the inner sealing layer and the outer layer the n-hexane extractables are less than 2 wt. %.

80. (Original): The film of claim 77 wherein in the copolymers of the inner sealing layer and the outer layer the n-hexane extractables are less than 1 wt. %.

81. (Previously Added): The film of claim 1, wherein the film has a shrinkage of more than 20% at 90°C in at least one direction.

82. (Previously Added): The film of claim 1, wherein the film has a shrinkage of more than 30% at 90°C in at least one direction.

83. (Previously Added): The film of claim 1, wherein the film has a shrinkage of more than 25% at 90°C in both directions.

84. (Previously Added): The film of claim 1, wherein the film has a shrinkage of more than 30% at 90°C in a first direction and a shrinkage of more than 44% at 90°C in a second direction.

85. (Previously Added): The film of claim 1, wherein the film has a shrinkage of more than 32% at 90°C in a first direction and a shrinkage of more than 48% at 90°C in a second direction.

86. (Previously Added): The film of claim 1, wherein the film consists essentially of four layers.

87. (Previously Added): The film of claim 1, wherein the four layers are in said sequence and in contact.

88. (Previously Added): The film of claim 22, wherein the film has a shrinkage of more than 20% at 90°C in at least one direction.

89. (Previously Added): The film of claim 22, wherein the film has a shrinkage of more than 30% at 90°C in at least one direction.

90. (Previously Added): The film of claim 22, wherein the film has a shrinkage of more than 25% at 90°C in both directions.

91. (Previously Added): The film of claim 22, wherein the film has a shrinkage of more than 30% at 90°C in a first direction and a shrinkage of more than 44% at 90°C in a second direction.

92. (Previously Added): The film of claim 22, wherein the film has a shrinkage of more than 32% at 90°C in a first direction and a shrinkage of more than 48% at 90°C in a second direction.

93. (Canceled): The film of claim 22, wherein the film excludes a core barrier layer.

94. (Previously Added): The film of claim 46, wherein the film consists essentially of said layers.

95. (Previously Added): The film of claim 48, wherein the film has a shrinkage of more than 20% at 90°C in at least one direction.

96. (Previously Added): The film of claim 48, wherein the film has a shrinkage of more than 30% at 90°C in at least one direction.

97. (Previously Added): The film of claim 48, wherein the film has a shrinkage of more than 25% at 90°C in both directions.

98. (Previously Added): The film of claim 48, wherein the film has a shrinkage of more than 30% at 90°C in a first direction and a shrinkage of more than 44% at 90°C in a second direction.

99. (Previously Added): The film of claim 48, wherein the film has a shrinkage of more than 32% at 90°C in a first direction and a shrinkage of more than 48% at 90°C in a second direction.

100. (Currently Amended) The film of claim 48, wherein the film excludes a core oxygen barrier layer.